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AUTHOR Smith, Elske
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ABSTRACT

The Minority High School Student Research Apprentice Program in Richmond, Virginia, aspires to stimulate among minority high school students an interest in pursuing careers in biomedical research and the health professions. Students are paid hourly wages commensurate with what they could earn at summer jobs. Students work with faculty mentors in their laboratories for 8 weeks during the summer, learning how to conduct research and report their findings. For an hour each week, the students also meet with officials representing such other aspects of the university as financial aid, admissions, Honors, and undergraduate education. In addition, students in this program interact with middle- and secondary-school minority students in other programs on campus at the same time: a 2-week urban journalism workshop for minority high school students and a Young Scholars program in mathematics for black seventh graders. This project description outlines student selection, program evaluation results, and funding. (Author/JDD)

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Minority High School Student Research Apprentice Program

College of Humanities and Sciences
Virginia Commonwealth University

National Institutes of Health Grant
#NSS 2 SO3 RR032745-09

Starting Date: 18 June 1990

Program Director: Dr. Elske Smith
Phone:(804) 367-1674

HE 024 160

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AASCU/ERIC Model Programs Inventory Project

The AASCU/ERIC Model Programs Inventory is a two-year project seeking to establish and test a model system for collecting and disseminating information on model programs at AASCU-member institutions--375 of the public four-year colleges and universities in the United States.

The four objectives of the project are:

- To increase the information on model programs available to all institutions through the ERIC system
- To encourage the use of the ERIC system by AASCU institutions
- To improve AASCU's ability to know about, and share information on, activities at member institutions, and
- To test a model for collaboration with ERIC that other national organizations might adopt.

The AASCU/ERIC Model Programs Inventory Project is funded with a grant from the Fund for the Improvement of Postsecondary Education to the American Association of State Colleges and Universities, in collaboration with the ERIC Clearinghouse on Higher Education at The George Washington University.

ABSTRACT

The Minority High School Student Research Apprentice Program aspires to stimulate among minority high school students an interest in pursuing careers in biomedical research and the health professions. Paid hourly wages commensurate with what they could earn at summer jobs, students work daily with faculty mentors in their laboratories for eight weeks during the summer, learning how to conduct research and to report their findings. For an hour each week, the students also meet with officials representing such other aspects of the university as financial aid, admissions, Honors, and undergraduate education. In addition, students in this program interact with middle- and secondary-school minority students in other programs on campus at the same time: a two-week urban journalism workshop for minority high school students and a Young Scholars program in mathematics for black seventh graders.

Minority High School Student
Research Apprentice Program

Introduction

This submission includes Parts A and B of AASCU/ERIC's format and the 1990 itinerary for the weekly ancilliary activities of the students.

Background

A national need exists for more scientists in education and in industry, and the need for minority (black) scientists is especially strong. Virginia Commonwealth University has 14% black enrollment and 17% minority enrollment, and as an urban research university it has identified this national need as an area for special emphasis. Accordingly, the College of Humanities and Sciences has undertaken to promote recuitment and retention of minorites, especially in the sciences. This program brings minority high school students into close contact with research faculty in the sciences and since the university includes schools in medicine, pharmacology, nursing, dentistry and allied health which permit "early admission" for outstanding freshmen, the program and the university are a natural match.

Description

The summer of 1990 marked the sixth consecutive year that the College of Humanities and Sciences of Virginia Commonwealth University has won this award from the National Institutes of Health's National Center for Research Resources (Division of Biomedical Research Support Resources). The objective is to stimulate interest among

minority high school students in having careers in the sciences, either in industry or in education. To accomplish this, the College conducts an eight-week program each summer which provides an appropriate income for the students and a small supply budget for each faculty mentor. The number of students involved in the program each summer ranges from 3-7 and the budget is about $2000 for each student. No administrative or overhead costs are provided by NIH.

In March, schools in the greater metropolitan Richmond area are invited to have students apply. Applications include a letter from the student, at least one letter of recommendation from a high school teacher or counselor, a copy of the student's transcript, and standardized test scores, if available. Students who will be juniors or seniors are especially encouraged since they are more mature and have had more training in science. From the applicants (48 this summer), faculty members who have agreed to participate select the students they wish to work with during the summer. At the midpoint in the program and at the end, all students and mentors meet to hear brief reports, usually with visual aids, from the students who describe the methodology of their porjects and report their findings.

As an additional benefit to the students, each week they engage in an ancilliary activity. They meet with various university officals and they interact with other pre-college students in similar programs on campus at the same time (see enclosed itinerary).

Results

Since this is an onging program, each summer faculty and students submit reports on the strengths and weaknesses of the program based on their experiences.

Adjustments are made accordingly. For example, only juniors and seniors are eligible now; the stipend has been raised to where it is closer to what the students could earn at summer work; faculty have been given small budgets to purchase supplies for the students to use. In general, though, evaluations of the program in its concept and its implementation have been very positive.

Conclusions and Recommendations

Since the program encourages interactions between individual students and their mentors, the number of students participating each summer has little effect on the quality of the each student's experience. However, to a degree "critical mass" is important as a social dimension to the program and consensus of opinion is that 10 students each summer would be optimal and still cost-efficient. This would require a budget of about $20,000 each summer. Additional support from NIH is being sought; already the university and the College have agreed to supplement NIH's award. Funds from the state's special pre-college outreach program as well as from local industry are being sought. The addition of an academic-year component is being considered. This would bring together an appropriate high school teacher for each student and each of the students from the previous summer along with their faculty mentors periodically during the academic year. This would require about $7000 additional funding per year.

ITINERARY
1990 NIH SUMMER FELLOWSHIP PROGRAM

Friday, June 15 - 3:30 Orientation Meeting
328 Hibbs

Monday, June 18 - 8:00 First day of program

Sunday, June 24 - 5:00 to 9:00 Picnic with Urban Journalism Workshop students
Place TBA

Wednesday, June 27 - 3:30 Meeting with Dr. Alvin Schexnider, Associate Vice President for Academic Affairs - 901 W. Franklin

Wednesday, July 4 - HOLIDAY

Friday, July 6 - 11:00 to 2:00 University Research Day with Department of Mathematical Sciences' students - 3310 NAB

Tuesday, July 10 - 3:30 Meeting of all NIH students, mentors and Dr. Terry Oggel, Associate Dean of the College of Humanities and Sciences - 328 Hibbs

Wednesday, July 18 - 3:30 Meet with Dr. Thomas Hall, Director of Honors Program
916 W. Franklin

Wednesday, July 25 - 3:30 Meet with Ms. Delores Taylor of Admissions Office
821 W. Franklin (meet in lobby)

Wednesday, August 1 - 3:30 Meet with Dr. William Dobbie of Financial Aid Office
328 Hibbs

Friday, August 10 - 3:00 Final day of program. Meeting of all NIH students, mentors, Dr. Oggel and Dr. Elske Smith, Dean of the College of Humanities and Sciences - 328 Hibbs